REMARKS

The Applicants appreciate the Examiner's thorough examination of the subject application. Applicants request reconsideration of the subject application based on the instant amendments and following remarks.

Status of the Claims

Claims 1 and 4 have been amended without prejudice or disclaimer. Support for the amendments can be found throughout the specification, e.g., at pages 18-19.

Claims 1 - 10 are pending in the application. Claims 8 and 9 stand withdrawn from consideration as being directed to a non-elected invention.

Claim 1, as presently pending, is directed to an *injection molded* resin container comprising a container body and a lid for closing the container body. As further provided by amended claim 1, the container body is produced by *injecting molten amorphous thermoplastic resin* into a cavity of a mold assembly having a cavity for forming a recessed flat portion and a peripheral rise portion of the container.

Interview Summary

The Examiner's courtesy in permitting a telephonic interview (the "Interview") with Applicants' undersigned representative on March 29, 2007, is gratefully acknowledged. During the Interview, the rejections of record were discussed. No final agreement was reached.

Rejection under 35 U.S.C. §112, first paragraph

In the Office Action, claims 1, 4 and 5 were again rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. The Examiner stated that "Applicant has not shown how "flatness" is distinguished from surface waviness." Office Action at page 3, Section 6. The rejection is traversed.

As discussed in previous papers, Applicants contend that the present specification describes the measurement of "flatness" and that one of ordinary skill in the art would understand the meaning of the term "flatness" and how to measure this property. For example, the Amendment filed with the Request for Continued Examination (RCE) filed October 20, 2006 (which is incorporated herein by reference), described the measurement of "flatness" and discussed the meaning of that term. Moreover, issued U.S. patent documents describing "flatness" were discussed.

Applicants provide the following additional discussion of "flatness", "surface waviness", and "sink mark depth."

a) Flatness. "Flatness" refers to the difference from the standard surface of a geometrically corrected surface plate in the flat surface (e.g., of a resin container). As shown in Exhibit A of the Amendment filed July 24, 2006 (a photograph of an article showing warpage), a deformed or warped article has poor flatness. Flatness can be measured by placing a specimen on a corrected surface plate of a three-dimensional structure measuring apparatus as a reference surface, and measuring the flatness of a region of a flat portion within 2 mm of the outer periphery of the flat portion. The deviation from the standard surface is then calculated by a least squares analysis. See also page 27, lines 6-27 of the present specification, and Paragraph 5 of the attached "Declaration of Yoshihiro Kayano Under 37 CFR 1.132" (hereinafter "the Declaration").

Thus, flatness is the difference from the standard surface of a geometrically corrected surface plate in the flat surface of the resin container. Applicants submit that one of ordinary skill in the art would readily understand the term "flatness" and would understand how this property is measured. It should be noted that the flatness value is typically much larger than the values for "surface waviness " or "sink mark depth" (see below).

b) Comparison of "flatness" with "surface waviness " or "sink mark depth". The present specification includes several Examples and Comparative Examples. As further described in the Declaration (e.g., at Paragraph 6), for Examples 1 and 3, and

Comparative Example 1, the values of "flatness," "surface waviness " and "sink mark depth" were calculated and the results are shown in the Table below. In each case a polycarbonate resin was used.

Table 1

	Material of core insert	Flatness	Surface Waviness	Sink mark depth
Example 1	Partially stabilized zirconia	0.335 mm	5 μm	0.2 μm
Example 3	Partially stabilized zirconia with metal film facing	0.287 mm	5 μm	0.7 μm
Comp. Example 1	Steel material	0.63 mm	85 μm	4.7 μm

As shown in Table 1, "flatness" shows the difference from the standard surface of a geometrically corrected surface plate in the flat surface of the resin container. Note that the flatness value is much larger than the values for "surface waviness" or "sink mark depth" (mm vs. μm).

As discussed in the Declaration, the difference between Examples 1 and 3 and Comparative Example 1 is the material of the core insert in the mold cavity in the injection molding process. As shown above, in Example 1, a partially stabilized zirconia core insert was used; in Example 3, a partially stabilized zirconia with metal film facing was used as a core insert; and in Comparative Example 1, a (conventional) steel material core insert was used. As seen from the Table and the Declaration, the flatness, surface waviness, and sink mark depth are all superior for the articles of the Examples relative to the Comparative Examples.

c) Distinction between surface waviness and sink mark depth. As discussed in the present specification and in the Declaration (e.g., at Paragraph 7), surface waviness is a measure of the roughness of the surface of the article (e.g., the resin container). Surface waviness is usually measured using a surface roughness tester (see, e.g., "SURFCOM" manufactured by TOKYO SEIMITSU CO., LTD.). Exhibit C, submitted with the Amendment filed July 24, 2006, shows one example of a "primary profile" measured by a surface roughness tester. In that primary profile (see the upper Figure of Exhibit C to the Amendment filed July 24, 2006), the transverse axis shows the length measured in along a flat surface, and the vertical axis shows the surface roughness (in the cross-sectional direction) of the surface. In this primary profile, "surface waviness" is shown as the measured value of difference between the maximum height and the minimum height in the cross-sectional dimension of the flat surface across the measured length (the transverse axis direction, 30 mm). The measurement of surface waviness is also described at page 28, lines 3 to 8 of the present specification.

"Sink mark depth" shows the concavity and convexity (irregularities) within a more narrow range than the measurement range of surface waviness. That is, measurement of sink mark depth is performed in areas of the surface having localized defects or "sink marks". Sink mark depth is determined using a surface roughness tester in an area having a sink mark and therearound. Then, in the measured primary profile (see the lower Figure of Exhibit C to the Amendment filed July 24, 2006, hereinafter "Exhibit C"), the irregularities in the partial range are measured. Note that the vertical axis scale of the lower Figure of Exhibit C is magnified compared to the upper Figure (the caption above the upper Figure refers to the magnification in the vertical axis as x1000, whereas in the lower Figure the magnification in the vertical axis is x2000). The sink mark depth is measured by using a surface roughness tester to obtain a primary profile of a region in which sink marks are formed, and then, from the primary profile, a distance between a tangent line of a higher inflection point and a tangent line of a lower inflection point is determined as the sink mark depth. In the

upper Figure of Exhibit C, the part where sink marks are formed is seen at 13 to 18 mm in the transverse axis (indicated by two arrows). Usually the value of "sink mark depth" is smaller than the value of surface waviness. The measurement of sink mark depth is also described at page 28, lines 14 to 21 of the present specification.

d) Relationship between the description in the present specification and the JIS B 0601-2001 reference. As previously noted, the specification describes the measurement of surface waviness. This description is as follows (page 28, lines 3-8):

> The surface waviness (Pz) of the flat portion (1A) is a value obtained by measuring the difference between a maximum height and a minimum height which are parallel with an ideal plane of the surface to be measured, over a maximum measuring length of 30 mm using a surface roughness tester.

In addition, the present specification provides (at page 28, lines 22-23) that "the above surface waviness (Pz) and sink mark depth are measured according to JIS B 0601-2001." This means that surface waviness and sink mark depth are measured by use of a "primary profile (waviness curve)" as described in JIS B 0601-2001 (that is, as shown in the upper and lower Figures of Exhibit C). Thus, by use of the obtained "primary profile (waviness curve)", values of "surface waviness" and "sink mark depth" can be measured according to the methods described in the specification. See also the Declaration at Paragraph 8.

e) Applicants also note the potential inconsistency between the Examiner's previously-stated position that the Sylvester patent discloses "flatness" (see the Office Action dated November 2, 2005, at page 5), and the Examiner's position that one of skill in the art would not know that flatness is a property distinguishable from "surface waviness" or "sink mark depth."

For at least the foregoing reasons, Applicants contend that the present specification describes the measurement of "surface waviness" and "sink mark" depth and that one of ordinary skill in the art would understand the meanings of the terms and how to measure these properties. Applications further contend that the description of

"flatness", "surface waviness" and "sink mark depth", as well as the methods for measuring these properties (which clearly differ from each other as described above), provide ample written description for the pending claims, as one of skill in the art would readily appreciate the distinctions between these properties. See also the Declaration at paragraph 9. Applicants therefore contend that the claims as previously pending fully complied with the requirements of 35 U.S.C. §112, first paragraph.

The present specification provides a clear, full, concise and exact description as required by 35 U.S.C. §112. Claims 1 (as amended), 4, and 5, are fully compliant with the requirements of 35 U.S.C. §112, including the written description requirements of §112, first paragraph. Reconsideration and withdrawal of the rejection is proper and such action is requested.

Rejection under 35 U.S.C. §103(a), first paragraph

Claims 1-7 and 10 were rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Bird in view of Satake and in further view of Sylvester. The rejection is traversed.

The Examiner states (at page 4 of the Office Action) that

> Bird teaches that the container body and recessed flat portion (bottom wall 116) are formed by injection molding since Bird teaches that the web 200 of thermoplastic polymer is supplied as a preformed sheet by continuous injection molding to a mold or die 204 that thermoforms the web. Since the pockets 112 are formed from web 200, and since bottom wall 116 is the bottom wall of each pocket 112, the container body and recessed flat portion of Bird are formed by injection molding.

Office Action at page 4 (internal citations omitted). Applicants cannot agree with these statements.

The Examiner's conflation of "injection molding" of a resin container according to the claimed invention with "continuous injection molding" of a web which is subsequently thermoformed (according to Bird) ignores the clear differences between

the claimed invention and the teachings of Bird. As one of ordinary skill would appreciate, the "continuous injection molding" described in Bird refers only to the formation of a preformed roll or web of material, not to the method of preparing a resin container or other article from that preformed roll or web.

Applicants submit herewith an excerpt of the "Encyclopedia of Polymer Science and Engineering, Vol. 16, 2nd Ed., (John Wiley & Sons, 1989). This reference – which is cited by Bird at column 13, lines 12-25 – discusses many molding methods, but, Applicants contend, does not describe "continuous injection molding." However, the attached excerpts discuss injection molding (see, e.g., page 102, lines 10-18, and page 136, in the "Summary"), and make clear that discrete finished parts are produced by this method, in contrast to the reference in Bird to "continuous injection molding" of a preformed roll or web.

As the Examiner appears to concede, Bird does not teach or suggest forming such injection molded container of the present invention, by *injecting molten amorphous thermoplastic resin into a cavity of a mold assembly*.

Thus, Bird does not teach *injection molded* resin containers having a container body composed of an injection molded amorphous thermoplastic resin or a container body having a recessed flat portion defined by a peripheral rise portion wherein the recessed flat portion is formed by injection-molding, as recited by pending claim 1 (and the remaining claims which depend therefrom). Bird does not teach or suggest forming an injection molded container by injecting molten amorphous thermoplastic resin into a cavity of a mold assembly, as also recited in amended claim 1.

Neither Sylvester nor Satake overcome the limitations of the Bird reference so as to "bridge the gap" between the teachings of Bird and the claimed invention. More particularly, neither Sylvester nor Satake teach or suggest an injection molded resin container comprising a container body having a recessed flat portion defined by a peripheral rise portion wherein the recessed flat portion is formed by injection-molding.

The Examiner has previously cited Satake as allegedly disclosing "an injection molded product for use as various electronic parts . . . that may be formed from an amorphous thermoplastic resin." Office Action dated November 2, 2005, at page 5. However, as Applicants understand the Satake reference, Satake merely discloses a particular resin and states generally that the resin can be formed into various products.

There is absolutely no teaching or suggestion in Satake that could bridge the gap between the deficient teachings of Bird and the presently-claimed invention. In particular, Satake does not teach or suggest an injection molded resin container, having a container body and a lid for closing the container body, can be produced by injecting molten amorphous thermoplastic resin into a cavity of a mold assembly having a cavity for forming a recessed flat portion and a peripheral rise portion of the container, as required by pending claim 1. Therefore, there would be no motivation to combine the references as suggested by the Examiner.

Similarly, Sylvester contains no teaching whatsoever of an injection molded resin container, having a container body and a lid for closing the container body, produced by injecting molten amorphous thermoplastic resin into a cavity of a mold assembly having a cavity for forming a recessed flat portion and a peripheral rise portion of the container, as required by pending claim 1. Sylvester does not discuss injection molded resin containers at all, much less resin containers as presently claimed. Therefore, Sylvester also cannot bridge the gap between the deficient teachings of Bird and the presently-claimed invention.

To establish a *prima facie* case of obviousness, the Federal Circuit has stated that "[o]bviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching[,] suggestion or incentive supporting the combination." In re Geiger (815 F.2d 686, 688, 2 U.S.P.Q.2d 1276, 1278 (Fed. Cir. 1987). Simply picking and choosing the elements of the claimed invention from among many different options in the art is hindsight and does not satisfy the requirements of 35 USC § 103(a). Applicants respectfully submit that the claimed

invention is not taught or suggested by any of the cited references, whether taken alone of in combination.

For at least the reasons discussed *supra*, one of ordinary skill in the art would not have been motivated to prepare the resin containers provided by the instantly claimed invention. Thus, withdrawal of the §103(a) rejection and reconsideration of the claims is requested.

Early and favorable consideration of the application and claims as amended is earnestly solicited.

Conclusion

Applicants request any extension of time required for response. Although it is not believed that any additional fees are needed to consider this submission, the Examiner is hereby authorized to charge our deposit account no. 04-1105 should any fee be deemed necessary.

Dated: May 4, 2007
Customer No. 21874

Respectfully submitted,

By /Mark D. Russett/
Mark D. Russett, Reg. No.: 41,281
EDWARDS ANGELL PALMER & DODGE LLP
P.O. Box 55874
Boston, Massachusetts 02205
(617) 239-0100
Attorneys/Agents For Applicant